

Evaluation of Mobile Real-Time Polymerase Chain Reaction Tests for the Detection of Severe Acute Respiratory Syndrome Coronavirus 2

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Supplementary Table 1A

Sample ID	Biomeme SARS-CoV-2 assay Ct values				BD Max 5'UTR assay Ct values			
	Results	Orf1ab	Spike	RPC	Result	5'UTR	E gene	RNaseP
03806*	?	No Ct*	35.11	23.31	POS	35.09	35.91	24.49
03821	POS	17.48	14.33	No Ct	POS	14.84	12.01	24.16
42356	POS	28.06	25.68	28.14	POS	26.12	22.83	23.71
07331	NEG	No Ct	No Ct	28.06	NEG	No Ct	No Ct	25.82
01241	NEG	No Ct	No Ct	28.76	NEG	No Ct	No Ct	25.96
42404	POS	29.56	25.77	41.54	POS	23.97	21.94	23.94
42401	POS	30.72	26.02	27.73	POS	21.9	No Ct	No Ct
09451	NEG	No Ct	No Ct	29.39	NEG	No Ct	No Ct	23.75
08761	NEG	No Ct	No Ct	28.44	NEG	No Ct	No Ct	28.22
42408	POS	27.31	25.15	29.46	POS	22.91	20.13	26.40
42403	POS	22.89	21.76	28.52	POS	21.36	18.87	25.62
03886	POS	27.05	24.83	28.10	POS	24.16	21.70	25.64
04179	NEG	No Ct	No Ct	29.00	NEG	No Ct	No Ct	24.97
09281	NEG	No Ct	No Ct	28.82	NEG	No Ct	No Ct	25.12
02186	NEG	No Ct	No Ct	28.28	NEG	No Ct	No Ct	25.11
42447	POS	34.26	28.55	27.67	POS	27.06	25.38	27.09
07387	NEG	No Ct	No Ct	29.93	NEG	No Ct	No Ct	26.56
08888	NEG	No Ct	No Ct	28.84	NEG	No Ct	No Ct	27.16
01517	POS	36.70	33.07	27.84	POS	36.15	31.53	24.14
00389	NEG	No Ct	No Ct	27.91	NEG	No Ct	No Ct	23.62
02190	NEG	No Ct	No Ct	27.95	NEG	No Ct	No Ct	25.42
42393	POS	22.33	21.07	31.51	POS	20.36	17.34	23.84
42444	POS	29.36	27.94	27.69	POS	34.03	31.50	22.20
42247	POS	27.34	26.08	27.72	POS	26.54	23.75	23.52
42451	POS	18.36	17.54	No Ct	POS	17.40	14.88	24.42
42563	POS	31.51	27.96	27.63	POS	27.18	25.02	25.21
06480	NEG	No Ct	No Ct	29.53	NEG	No Ct	No Ct	24.65
00376	NEG	No Ct	No Ct	28.99	NEG	No Ct	No Ct	29.78
42540	POS	30.35	27.19	27.56	POS	30.70	27.58	22.58
01173	NEG	No Ct	No Ct	29.51	NEG	No Ct	No Ct	27.01
02474	NEG	No Ct	No Ct	29.22	NEG	No Ct	No Ct	26.45
05772	NEG	No Ct	No Ct	28.02	NEG	No Ct	No Ct	24.28
03988	POS	30.13	28.14	27.64	POS	29.50	25.83	25.20

03475	NEG	No Ct	No Ct	34.67	NEG	No Ct	No Ct	24.27
42434	POS	30.43	27.15	31.91	POS	25.05	21.61	No Ct
09777	NEG	No Ct	No Ct	32.05	NEG	No Ct	No Ct	24.90
42645	POS	32.56	26.34	27.70	POS	26.7	No Ct	No Ct
42614	POS	29.82	26.25	28.10	POS	29.52	25.52	23.47
47770	NEG	No Ct	No Ct	28.14	NEG	No Ct	No Ct	26.36
83060	NEG	No Ct	No Ct	29.48	NEG	No Ct	No Ct	29.96
50150	NEG	No Ct	No Ct	35.15	NEG	No Ct	No Ct	26.22
48940	NEG	No Ct	No Ct	29.70	NEG	No Ct	No Ct	24.03
42640	POS	34.31	29.91	27.78	POS	29.6	No Ct	No Ct
42712	POS	18.54	17.38	No Ct	POS	18.49	16.58	25.12
42697	POS	30.20	26.93	27.72	POS	28.13	25.61	25.66
00330	NEG	No Ct	No Ct	30.59	NEG	No Ct	No Ct	25.90
07069	NEG	No Ct	No Ct	32.02	NEG	No Ct	No Ct	31.23
04259	NEG	No Ct	No Ct	29.49	NEG	No Ct	No Ct	26.62
42633	POS	26.83	25.44	29.01	POS	27.1	No Ct	No Ct
49758	NEG	No Ct	No Ct	28.78	NEG	No Ct	No Ct	24.76
42782	POS	37.88	34.09	28.04	POS	35.34	33.24	25.00
42784	POS	31.51	28.45	27.86	POS	29.75	26.77	24.86
42631	POS	22.21	20.93	No Ct	POS	23.28	19.03	24.50
81257	NEG	No Ct	No Ct	28.57	NEG	No Ct	No Ct	22.47
47956	NEG	No Ct	No Ct	28.57	NEG	No Ct	No Ct	25.57
47955	NEG	No Ct	No Ct	29.40	NEG	No Ct	No Ct	24.24
47953	NEG	No Ct	No Ct	29.25	NEG	No Ct	No Ct	31.53
01553	POS	39.28	35.79	29.58	POS	36.75	34.37	27.63
02559	POS	35.58	31.83	28.46	POS	31.87	30.96	28.36
42809	POS	35.99	32.71	29.09	POS	33.48	32.61	24.27
L0001	POS	32.18	30.57	34.25	POS	30.19	26.45	25.24
L0004	POS	20.98	20.14	No Ct	POS	19.56	15.82	29.19
L0012	POS	26.34	25.46	31.21	POS	28.13	25.61	25.66
L0013	POS	21.75	21.02	No Ct	POS	21.9	No Ct	No Ct
L0014	POS	21.91	20.97	No Ct	POS	22.8	No Ct	No Ct
L0016	POS	22.12	20.62	No Ct	POS	23.1	No Ct	No Ct
D1020	POS	No Ct	37.86	32.21	POS	20.35	19.23	26.65
D1026	POS	19.10	18.50	No Ct	POS	17.60	15.87	24.43
D1002	POS	23.25	22.08	No Ct	POS	22.05	18.56	No Ct
D1004	POS	29.13	28.13	32.48	POS	28.25	24.94	No Ct
D1010	POS	25.78	24.85	31.23	POS	25.80	22.36	25.30
D1011	POS	36.30	35.16	31.24	POS	34.37	32.99	24.52
D1013	POS	17.06	16.06	No Ct	POS	18.34	15.92	No Ct
D1021	POS	23.26	22.33	No Ct	POS	23.86	21.34	24.51
D1022	POS	29.36	28.44	31.18	POS	29.59	25.17	29.75
D1025	POS	29.08	28.19	30.89	POS	31.06	27.76	26.62
M0002	POS	22.09	21.04	No Ct	POS	21.02	18.66	No Ct
M0006	POS	27.56	26.54	32.13	POS	29.5	No Ct	No Ct
M0015	POS	29.83	29.08	31.98	POS	29.28	26.85	26.30
M0018	POS	20.34	19.62	No Ct	POS	20.17	17.20	25.08
RM001	NEG	No Ct	No Ct	31.70	NEG	No Ct	No Ct	No Ct
MG001	NEG	No Ct	No Ct	33.34	NEG	No Ct	No Ct	No Ct
JS001	NEG	No Ct	No Ct	33.19	NEG	No Ct	No Ct	No Ct

MA001	NEG	No Ct	No Ct	31.19	NEG	No Ct	No Ct	No Ct
NS001	NEG	No Ct	No Ct	31.01	NEG	No Ct	No Ct	No Ct
SL001	NEG	No Ct	No Ct	32.03	NEG	No Ct	No Ct	No Ct
VW001	NEG	No Ct	No Ct	31.86	NEG	No Ct	No Ct	No Ct
TN001	NEG	No Ct	No Ct	30.53	NEG	No Ct	No Ct	No Ct
VM001	NEG	No Ct	No Ct	31.23	NEG	No Ct	No Ct	No Ct
LA001	NEG	No Ct	No Ct	32.05	NEG	No Ct	No Ct	No Ct

Supplementary Table 1B

Sample ID	Precision Biomonitoring TripleLock SARS-CoV-2 assay				CDC EUA assay Ct values			
	Result	E Gene	UTR	RNase P	Result	E gene	N gene	RNaseP
24046	POS	28.8	32.53	22.36	POS	35.02	36.35	22.49
28902	POS	30.14	32.46	25.12	POS	33.71	35.47	24.86
17891	NEG	No Ct	No Ct	29.09	NEG	No Ct	No Ct	28.84
25598	POS	23.95	27.43	24.97	POS	27.96	29.29	26.45
17790	NEG	No Ct	No Ct	23.17	NEG	No Ct	No Ct	23.17
25409	POS	24.09	27.42	24.12	POS	26.53	28.18	24.39
26037	POS	27.15	30.44	27.14	POS	27.99	29.74	26.39
25631	POS	28.01	33.51	26.11	POS	31.09	32.8	26.13
41548	NEG	No Ct	No Ct	26.1	NEG	No Ct	No Ct	27.51
17849	NEG	No Ct	No Ct	26.23	NEG	No Ct	No Ct	25.66
17996	NEG	No Ct	No Ct	29.02	NEG	No Ct	No Ct	25.3
23896	POS	31.86	34.95	26.22	POS	34.8	37.01	24.93
26601	POS	28.58	33.09	23.31	POS	32.12	34.02	23.64
39659	NEG	No Ct	No Ct	26.1	NEG	No Ct	No Ct	25.04
12149	POS	28.93	31.85	26.14	POS	31.8	33.76	25.06
25335	POS	28.06	31.22	26.18	POS	31.24	33.61	25.13
17301	NEG	No Ct	No Ct	23.28	NEG	No Ct	No Ct	22.4
40875	NEG	No Ct	No Ct	23.17	NEG	No Ct	No Ct	24.18
27084	POS	26.77	31.09	25.69	POS	29.17	31.18	23.9
41067	NEG	No Ct	No Ct	24.07	NEG	No Ct	No Ct	27.17
17697	NEG	No Ct	No Ct	33.47	NEG	No Ct	No Ct	31.13
24031	POS	31.16	34.83	28.04	POS	33.73	35.87	27.96
25185	POS	23.77	28.6	26.08	POS	26.61	28.11	25.09
28703	POS	33.19	38.26	31.92	POS	28.76	30.55	26.52
28815	POS	32.85	35.88	26.27	POS	36.16	38.47	24.39
26140	POS	20.1	21.01	23.89	POS	18.71	19.58	24.42
25580	POS	21.02	23.86	24.11	POS	22.32	23.65	25.35
46342	NEG	No Ct	No Ct	28.2	NEG	No Ct	No Ct	26.39

48456	NEG	No Ct	No Ct	21.19	NEG	No Ct	No Ct	22.09
42628	POS	28.98	31.11	29.07	POS	31.41	33.47	29.58
46630	NEG	No Ct	No Ct	25.19	NEG	No Ct	No Ct	25.16
38958	POS	23.03	26.11	23.14	POS	22.75	24.14	23.24
28223	POS	26.79	29.22	25.2	POS	22.41	24.06	24.68
48400	NEG	No Ct	No Ct	26.37	NEG	No Ct	No Ct	23.77
41536	POS	23.03	26.31	29.77	POS	24.01	25.31	28.58
46975	NEG	No Ct	No Ct	22.21	NEG	No Ct	No Ct	22.13
47251	NEG	No Ct	No Ct	27.19	NEG	No Ct	No Ct	25.93
45099	NEG	No Ct	No Ct	30.07	NEG	No Ct	No Ct	27.56
35042	POS	16.2	18.98	25.67	POS	17.99	18.72	24.27
41066	NEG	No Ct	No Ct	26.09	NEG	No Ct	No Ct	24.75
44934	NEG	No Ct	No Ct	27.16	NEG	No Ct	No Ct	25.26
18598	NEG	No Ct	No Ct	26.06	NEG	No Ct	No Ct	25.7
34664	POS	16.19	19.28	21.25	POS	17.49	18.16	22.68
40492	POS	22.18	25.34	25.23	POS	23.49	24.52	25.83
43148	POS	32.89	31	24.26	POS	32.36	34.08	24.06
17937	NEG	No Ct	No Ct	27.04	NEG	No Ct	No Ct	25.97
47121	NEG	No Ct	No Ct	24.19	NEG	No Ct	No Ct	23.3
42731	NEG	No Ct	No Ct	32.02	NEG	No Ct	No Ct	29.75
43254	POS	30.39	31.86	24.3	POS	32.89	34.48	23.17
42629	POS	25.96	30.06	25.18	POS	25.39	26.96	25.06
42653	NEG	No Ct	No Ct	24.12	NEG	No Ct	No Ct	24.03
22328	NEG	41.07	No Ct	29.08	NEG	No Ct	No Ct	27.03
18454	NEG	41.81	No Ct	32.21	NEG	No Ct	No Ct	30.38
39778	NEG	No Ct	No Ct	28.12	NEG	No Ct	No Ct	25.59
35286	POS	27.02	30.03	26.26	POS	24.1	25.41	25.71
37217	POS	16.06	19.17	23.16	POS	17.75	18.3	23.24
39323	NEG	No Ct	No Ct	24.31	NEG	No Ct	No Ct	23.11
40949	POS	24.86	28.73	28.72	POS	26.51	28.16	28.27
17468	NEG	No Ct	No Ct	26.15	NEG	No Ct	No Ct	25.45
17938	NEG	No Ct	No Ct	29.14	NEG	No Ct	No Ct	29.69
17532	NEG	No Ct	No Ct	26.33	NEG	No Ct	No Ct	24.81
42100	NEG	No Ct	No Ct	26.26	NEG	No Ct	No Ct	24.81
40648	NEG	No Ct	No Ct	23.28	NEG	No Ct	No Ct	23.12
26982	POS	29	33.44	27.21	POS	32.59	34.73	26.54
23982	POS	18.09	21.36	22.96	POS	20.6	21.8	23.92
30149	POS	22.1	25.93	25.09	POS	21.59	22.78	25.28
17472	NEG	No Ct	No Ct	32.03	NEG	No Ct	No Ct	30.27

Supplementary Table 1C

Sample ID	Precision Biomonitoring TripleLock SARS-CoV-2 assay				BD Max 5'UTR assay Ct values			
	Result	5'UTR	E gene	RNaseP	Result	5'UTR	E gene	RNaseP
03806	POS	31.82	30.48	25.20	POS	35.09	35.91	24.49
03821	POS	16.17	13.30	39.58	POS	14.84	12.01	24.16
42356	POS	27.08	24.00	25.05	POS	26.12	22.83	23.71
07331	NEG	No Ct	No Ct	28.15	NEG	No Ct	No Ct	25.82
01241	NEG	No Ct	No Ct	30.08	NEG	No Ct	No Ct	25.96
42404	POS	29.77	28.21	24.01	POS	23.97	21.94	23.94
42401	POS	29.15	25.15	27.15	POS	21.9	No Ct	No Ct
09451	NEG	No Ct	No Ct	29.01	NEG	No Ct	No Ct	23.75
08761	NEG	No Ct	No Ct	30.96	NEG	No Ct	No Ct	28.22
42408	POS	29.96	25.17	27.30	POS	22.91	20.13	26.40
42403	POS	23.98	21.22	26.12	POS	21.36	18.87	25.62
03886	POS	29.11	25.04	28.08	POS	24.16	21.70	25.64
04179	NEG	No Ct	No Ct	29.21	NEG	No Ct	No Ct	24.97
09281	NEG	No Ct	No Ct	30.02	NEG	No Ct	No Ct	25.12
02186	NEG	No Ct	No Ct	30.13	NEG	No Ct	No Ct	25.11
42447	POS	30.08	27.23	29.24	POS	27.06	25.38	27.09
07387	NEG	No Ct	No Ct	30.15	NEG	No Ct	No Ct	26.56
08888	NEG	No Ct	No Ct	29.18	NEG	No Ct	No Ct	27.16
01517	POS	33.90	30.20	24.26	POS	36.15	31.53	24.14
00389	NEG	No Ct	No Ct	27.12	NEG	No Ct	No Ct	23.62
02190	NEG	No Ct	No Ct	29.08	NEG	No Ct	No Ct	25.42
42393	POS	24.10	20.18	27.26	POS	20.36	17.34	23.84
42444	POS	29.36	26.90	22.26	POS	34.03	31.50	22.20
42247	POS	28.34	24.62	25.07	POS	26.54	23.75	23.52
42451	POS	21.13	17.20	35.89	POS	17.40	14.88	24.42
42563	POS	30.01	27.01	26.90	POS	27.18	25.02	25.21
06480	NEG	No Ct	No Ct	28.08	NEG	No Ct	No Ct	24.65
00376	NEG	No Ct	No Ct	31.12	NEG	No Ct	No Ct	29.78
42540	POS	28.35	25.41	23.27	POS	30.70	27.58	22.58
01173 [#]	NEG	No Ct	0 [#]	30.30	NEG	No Ct	No Ct	27.01
02474	NEG	No Ct	No Ct	31.04	NEG	No Ct	No Ct	26.45
05772	NEG	No Ct	No Ct	27.15	NEG	No Ct	No Ct	24.28
03988	POS	31.20	26.85	26.04	POS	29.50	25.83	25.20
03475	NEG	No Ct	No Ct	29.15	NEG	No Ct	No Ct	24.27
42434	POS	35.22	30.20	26.87	POS	25.05	21.61	No Ct
09777	NEG	No Ct	No Ct	29.07	NEG	No Ct	No Ct	24.90
42645	POS	28.36	25.10	25.12	POS	26.7	No Ct	No Ct
42614	POS	29.99	25.87	24.16	POS	29.52	25.52	23.47
47770	NEG	No Ct	No Ct	29.13	NEG	No Ct	No Ct	26.36
83060	NEG	No Ct	No Ct	29.47	NEG	No Ct	No Ct	29.96
50150	NEG	No Ct	No Ct	30.93	NEG	No Ct	No Ct	26.22

48940	NEG	No Ct	No Ct	29.97	NEG	No Ct	No Ct	24.03
42640	POS	30.66	28.21	27.18	POS	29.6	No Ct	No Ct
42712	POS	20.15	17.15	25.44	POS	18.49	16.58	25.12
42697	POS	28.09	25.14	25.19	POS	28.13	25.61	25.66
00330	NEG	No Ct	No Ct	29.19	NEG	No Ct	No Ct	25.90
07069	NEG	No Ct	No Ct	31.14	NEG	No Ct	No Ct	31.23
04259	NEG	No Ct	No Ct	31.05	NEG	No Ct	No Ct	26.62
42633	POS	29.17	25.20	27.14	POS	27.1	No Ct	No Ct
49758	NEG	No Ct	No Ct	30.26	NEG	No Ct	No Ct	24.76
42782	POS	35.36	33.04	29.16	POS	35.34	33.24	25.00
42784	POS	30.62	27.30	27.18	POS	29.75	26.77	24.86
42631	POS	24.18	20.09	27.17	POS	23.28	19.03	24.50
81257	NEG	No Ct	No Ct	27.05	NEG	No Ct	No Ct	22.47
47956	NEG	No Ct	No Ct	29.17	NEG	No Ct	No Ct	25.57
47955	NEG	No Ct	No Ct	30.13	NEG	No Ct	No Ct	24.24
47953	NEG	No Ct	No Ct	31.01	NEG	No Ct	No Ct	31.53
01553	POS	35.69	33.51	29.20	POS	36.75	34.37	27.63
02559	POS	33.91	31.26	31.10	POS	31.87	30.96	28.36
42809	POS	35.32	31.66	27.09	POS	33.48	32.61	24.27

* Inconclusive

#Does not cross 500RFU threshold, adjusted to 0.

Clinical samples with only UTR Ct were run on the BD Max.

Clinical samples with UTR, E gene, and RNaseP were run on Rotor gene Q or CFX96.